

AMENDED IN ASSEMBLY AUGUST 24, 2006

SENATE BILL

No. 1379

Introduced by Senators Perata and Ortiz
(Coauthor: Assembly Member Laird)

February 21, 2006

An act to add Chapter 8 (commencing with Section 105440) to Part 5 of Division 103 of the Health and Safety Code, relating to public health.

LEGISLATIVE COUNSEL'S DIGEST

SB 1379, as amended, Perata. Biomonitoring.

Existing law establishes various programs for the protection of the public from exposure to toxins, including, but not limited to, the Childhood Lead Poisoning Prevention Act, administered by the State Department of Health Services, which imposes a fee upon manufacturers or persons who are responsible for lead contamination and applies the proceeds of the fee to reduction or elimination of the harm caused by the lead contamination.

This bill would require ~~the Division of Environmental and Occupational Disease Control within the department~~ *in collaboration with the California Environmental Protection Agency* to establish the ~~Healthy Californians~~ *California Environmental Contaminant* Biomonitoring Program to monitor the presence and concentration of designated chemicals, as defined, in Californians.

This bill would require the department and the agency to establish ~~an advisory panel~~ *a Scientific Guidance Panel* to assist the department and the agency. ~~The bill would establish the Healthy Californians Biomonitoring Fund for deposit of funds, for expenditure by the department and agency upon appropriation by the Legislature, for the~~

~~biomonitoring program.~~ The bill would require the department to provide public access to information, and to report to the Legislature and the public.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 ~~(a) Chronic disease has reached epidemic proportions in the~~
4 ~~United States. An estimated 125 million Americans, or 43~~
5 ~~percent of the population, have at least one chronic illness, while~~
6 ~~60 million people, or 21 percent of the population, suffer from~~
7 ~~multiple chronic conditions. Roughly 20 million American~~
8 ~~children suffer from at least one chronic health problem. Cancer,~~
9 ~~asthma, birth defects, developmental disabilities, endometriosis,~~
10 ~~and infertility, are becoming increasingly common, and mounting~~
11 ~~evidence links incidence and severity of these diseases to~~
12 ~~exposure to environmental toxicants.~~

13 ~~(b) Chronic diseases carry enormous costs to California. For~~
14 ~~example, the estimated total cost of asthma in California is~~
15 ~~approximately \$1.27 billion annually. For individuals born in~~
16 ~~1988 with one or more of the 18 most common birth defects,~~
17 ~~estimated lifetime costs for medical treatment and lost~~
18 ~~productivity exceed \$1 trillion. Special education for the~~
19 ~~estimated one million California children with learning~~
20 ~~disabilities, carries an annual price tag of \$12 billion.~~

21 ~~(c)~~

22 ~~(a) An estimated 100,000 chemicals are registered for use~~
23 ~~today in the United States. Another 2,000 chemicals are added~~
24 ~~each year. Some toxicological screening data exists for only 7 to~~
25 ~~10 percent of these chemicals. More than 90 percent of these~~
26 ~~chemicals have never been tested for their effects on human~~
27 ~~health. Large numbers of these chemicals are found in cosmetics,~~
28 ~~personal care products, pesticides, food dyes, cleaning products,~~
29 ~~fuels, and plastics. Because of their ubiquity in modern life,~~
30 ~~Californians are commonly exposed to multiple chemicals every~~
31 ~~day. Many of these chemicals persist in the environment, and~~

1 accumulate and remain in body fat, and have been shown to be
2 toxic.

3 ~~(d)~~

4 (b) Biomonitoring studies have scientifically demonstrated
5 that human exposure to a multitude of ~~persistent chemicals is~~
6 ~~both chronic and chemicals is~~ widespread. The federal Centers
7 for Disease Control and Prevention has documented the presence
8 of 148 environmental chemicals in the blood and urine of
9 Americans of all ages and races.

10 ~~(e) The presence of toxins in the environment raises special~~
11 ~~health concerns for California families. The developing fetus is at~~
12 ~~heightened risk from in utero exposure to harmful chemicals~~
13 ~~because the neurological, reproductive, and immunological~~
14 ~~systems of a fetus are still in development.~~

15 ~~(f) Current research indicates possible linkages between fetal~~
16 ~~contamination and the adult onset of disease. Biomonitoring~~

17 (c) Biomonitoring studies will provide data that will help
18 California scientists, researchers, public health personnel, and
19 community members explore linkages between chemical
20 exposures and health.

21 ~~(g)~~

22 (d) Biomonitoring data supports public health by establishing
23 trends in chemical exposures, validating modeling and survey
24 methods, supporting epidemiological studies, identifying
25 ~~impacted communities or particularly vulnerable~~ *highly exposed*
26 communities, addressing the data gaps between chemical
27 exposures and specific health outcomes, ~~assisting in informing~~
28 health responses to unanticipated emergency exposures,
29 assessing the effectiveness of current regulations, and helping to
30 set priorities for reform.

31 ~~(h) The priority public policy recommendation from the 2002~~
32 ~~International Summit on Breast Cancer and the Environment was~~
33 ~~to establish a national biomonitoring program in the United~~
34 ~~States.~~

35 ~~(i)~~

36 (e) In September 2001, the Legislature passed Senate Bill 702
37 (Chapter 538, Statutes of 2001), making California the first state
38 in the nation to begin planning a statewide environmental health
39 tracking network for chronic diseases and environmental hazards
40 and exposures. To help implement the program, the Senate Bill

1 702 Expert Working Group has recommended the establishment
2 of a statewide biomonitoring program.

3 (f) *In September 2003, the Legislature passed Assembly Bill*
4 *1360 (Chapter 664, Statutes of 2003), that requires the*
5 *development and use in California of a comprehensive system of*
6 *environmental measurements known as environmental*
7 *indicators. The basis for the bill was the April 2002 report,*
8 *“Environmental Protection Indicators for California,” by the*
9 *California Environmental Protection Agency and the Resources*
10 *Agency. This report identifies biomonitoring as part of an overall*
11 *system of environmental indicators that California should*
12 *develop to guide policy and budgetary decisions.*

13 (j)

14 (g) The Legislature, therefore, finds and declares that the
15 establishment of a statewide biomonitoring program ~~is necessary~~
16 ~~to identify~~ *will assist in the evaluation of the presence of toxic*
17 ~~chemicals in individuals and communities, to educate and~~
18 ~~counsel affected individuals and communities, and to develop~~
19 ~~strategies to prevent exposures to potentially harmful chemicals.~~
20 *A representative sample of Californians, establish trends in the*
21 *levels of these chemicals in Californians’ bodies over time, and*
22 *assess effectiveness of public health efforts and regulatory*
23 *programs to decrease exposures of Californians to specific*
24 *chemical contaminants. A statewide and community-based*
25 *biomonitoring program will expand biomedical, epidemiological,*
26 *and behavioral public health research. California, an established*
27 *leader in health promotion, health policy, and health care*
28 *delivery and response, should encourage and fund this research,*
29 *which will contribute to the health and well-being of millions of*
30 *people.*

31 SEC. 2. Chapter 8 (commencing with Section 105440) is
32 added to Part 5 of Division 103 of the Health and Safety Code, to
33 read:

1 CHAPTER 8. ~~HEALTHY CALIFORNIANS~~ CALIFORNIA
2 ENVIRONMENTAL CONTAMINANT BIOMONITORING PROGRAM

3
4 Article 1. General

5
6 105440. (a) This chapter shall be known, and may be cited,
7 as the ~~Healthy Californians~~ *California Environmental*
8 *Contaminant Biomonitoring Program*.

9 (b) For the purposes of this chapter, the following terms have
10 the following meanings:

11 (1) “Agency” means the California Environmental Protection
12 Agency.

13 (2) “Biomonitoring” means the process by which ~~the presence~~
14 ~~and concentration of toxic~~ chemicals and their metabolites are
15 ~~identified within a biospecimen as a means to assess the chemical~~
16 ~~body burden.~~ *identified and measured within different biological*
17 *specimens.*

18 (3) ~~“Biospecimen”~~ “*Biological specimen*” means a sample
19 taken from a biophysical substance, that is reasonably available
20 within a human body, for use as a medium to measure the
21 presence and concentration of toxic chemicals.

22 (4) “Community” means geographically or nongeographically
23 based populations that may participate in the *community-based*
24 biomonitoring program. A “nongeographical community”
25 includes, but is not limited to, populations that may share a
26 common chemical exposure through similar occupations,
27 populations experiencing a common health outcome that may be
28 linked to chemical exposures, or populations that may experience
29 similar chemical exposures because of comparable consumption,
30 lifestyle, ~~or~~ product use, *or subpopulations that share ethnicity,*
31 *age, or gender.*

32 (5) “Department” means the State Department of Health
33 Services.

34 (6) “Designated chemicals” means those chemicals that are
35 known to, or strongly suspected of, adversely impacting human
36 health or development, based upon scientific, peer-reviewed
37 animal, human, or in vitro studies, *and consist of only those*
38 *substances including chemical families or metabolites that are*
39 *included in the federal Centers for Disease Control and*
40 *Prevention studies that are known collectively as the National*

1 *Reports on Human Exposure to Environmental Chemicals*
2 *program and any substances as specified pursuant to subdivision*
3 *(c) of Section 105449.*

4 (7) “Director” means the Director of Health Services.

5 ~~(8) “Division” means the Division of Environmental and~~
6 ~~Occupational Disease Control within the department.~~

7 (8) “DTSC” means the Department of Toxic Substances
8 Control within the agency.

9 (9) “Office” means the Office of Environmental Health
10 Hazard Assessment within the agency.

11 (10) “Panel” means the ~~Healthy Californians Biomonitoring~~
12 ~~Program Advisory Scientific Guidance Panel~~ established
13 pursuant to Article 2 (commencing with Section 105448).

14 (11) “Program” or “biomonitoring program” means the
15 California Environmental Contaminant Biomonitoring Program,
16 which shall be established and operated by the department, in
17 collaboration with the agency, the office, and DTSC.

18 ~~(11)~~

19 (12) “Secretary” means the Secretary ~~for~~ of the California
20 Environmental Protection Agency.

21 105441. The ~~division~~ department, in collaboration with the
22 agency, shall establish the ~~Healthy Californians California~~
23 *Environmental Contaminant Biomonitoring Program*. The
24 ~~division~~ department is the lead ~~agency~~ entity for the program
25 unless otherwise specified in this chapter. The program shall
26 utilize ~~biospecimens~~ *biological specimens*, as appropriate, to
27 identify ~~toxic~~ *designated* chemicals that are present in the bodies
28 of Californians. *Biomonitoring shall utilize scientifically based*
29 *statewide surveys. Additional community-based surveys shall be*
30 *contingent on funding and shall be statistically valid and*
31 *scientifically based*. Biomonitoring shall take place on a strictly
32 voluntary and confidential basis. Results reported pursuant to this
33 chapter shall not disclose individual confidential information of
34 participants. Appropriate ~~biospecimens~~ *biological specimens*
35 shall be used to monitor and assess the presence and
36 concentration of designated chemicals. *Biological specimens*
37 *shall be analyzed by laboratories operated by the department,*
38 *DTSC, or their contractors.*

39 105443. (a) All participants shall be evaluated for the
40 presence of designated chemicals as a component of the

1 biomonitoring process. Participants shall be provided with
2 ~~information and a consultation to explain their individual results.~~
3 *information and fact sheets about the program's activities and its*
4 *findings. Individual participants may request and shall receive*
5 *their complete results. Any results provided to participants shall*
6 *be subject to the Institutional Review Board protocols and*
7 *guidelines. When either physiological or chemical data obtained*
8 *from a participant indicate a significant known health risk,*
9 *program staff experienced in communicating biomonitoring*
10 *results shall consult with the individual and recommend followup*
11 *steps, as appropriate.* Program administrators shall receive
12 training in administering the program in an ethical, culturally
13 sensitive, participatory, and community-based manner.

14 ~~(b) The agency and office, in consultation with experts and~~
15 ~~relevant stakeholders, may utilize the program findings to expand~~
16 ~~the scope of this program to include a representative cross~~
17 ~~section of Californians.~~

18 ~~(c) Communities selected for biomonitoring shall be reflective~~
19 ~~of the economic, racial, and ethnic composition of the state.~~

20 *(b) Individuals selected to participate in the biomonitoring*
21 *program shall reflect the age, economic, racial, and ethnic*
22 *composition of the state. Other selection criteria may be applied,*
23 *as appropriate, for studies of specific populations.*

24 ~~(d) Educational~~

25 *(c) Informational materials and outreach activities directed to*
26 *program participants and communities shall, to the extent*
27 *possible, be culturally appropriate and translated as needed. In*
28 ~~addition, educational~~ *Educational materials shall be adapted to*
29 ~~the biospecimen being used and shall be produced after~~
30 ~~consulting the community that is being biomonitoring.~~ *biological*
31 *specimens being used.*

32 105444. (a) ~~The department shall adopt~~ *program shall*
33 *develop* guidelines and model protocols that address the science
34 and practice of biomonitoring to implement this chapter,
35 *including, but not limited to, study design, subject recruitment,*
36 *and data collection and management,* and that accomplish all of
37 the following:

38 (1) Ensure confidentiality and informed consent.

39 (2) Communicate findings to participants, communities, and
40 the general public.

(3) Emphasize all aspects of the program in a culturally sensitive manner.

(4) Serve as a guide for other biomonitoring programs supported by state funds.

~~(b) The department shall consider, and adapt as appropriate, the analytical~~

(b) The program shall incorporate, as appropriate, the methods utilized by the federal Centers for Disease Control and Prevention for the studies known collectively as the National Report on Human Exposure to Environmental Chemicals.

~~(c) The department shall work~~ *program shall be implemented in collaboration with the California Environmental Health Tracking Program and the environmental indicators system maintained by the office pursuant to Section 71081 of the Public Resources Code.*

(d) The department, office, and DTSC shall collaborate on the development of fact sheets and other informational and outreach materials for the biomonitoring program.

(e) The department, in collaboration with the office and DTSC, shall conduct statistical and epidemiological analyses of the biomonitoring results.

~~(d)~~

(f) Personal information as defined in Section 1798.3 of the Civil Code, shall not be shared without the written and informed consent of the individual to whom it pertains.

~~(e)~~

(g) No governmental agency or private person or entity shall discriminate against a person or community based upon the biomonitoring results.

Article 2. ~~The Advisory~~ Scientific Guidance Panel

105448. ~~(a) The~~ *In implementing the program, the department and the agency shall establish—the Healthy Californians Biomonitoring Program Advisory a Scientific Guidance Panel. The panel shall be composed of 16 members as follows: nine members, whose expertise shall encompass the disciplines of public health, epidemiology, biostatistics, environmental medicine, risk analysis, exposure assessment, developmental biology, laboratory sciences, bioethics, maternal*

1 *and child health with a specialty in breastfeeding, and*
2 *toxicology.*

3 ~~(1) Eight members in total, shall have expertise in public~~
4 ~~health, epidemiology, environmental health and developmental~~
5 ~~biology, and toxicology.~~

6 ~~(2) The other eight members shall include those who have~~
7 ~~expertise in environmental health, environmental justice, the~~
8 ~~special vulnerability of children, maternal and child health with a~~
9 ~~specialty in breastfeeding, health affected groups, the elderly, and~~
10 ~~other communities of concern and one of these members shall be~~
11 ~~a representative from industry.~~

12 ~~(b) The director, the secretary, the President pro Tempore of~~
13 ~~the Senate, and the Speaker of the Assembly shall each appoint~~
14 ~~four members to the panel. Each appointing officer shall appoint~~
15 ~~two members fulfilling the qualifications of paragraph (1) of~~
16 ~~subdivision (a) and two members fulfilling the qualifications of~~
17 ~~paragraph (2) of subdivision (a), except that one of the~~
18 ~~appointments of the secretary shall be the industry representative~~
19 ~~set forth in paragraph (2) of subdivision (a).~~

20 *(b) The Governor shall appoint five members to the panel, the*
21 *Senate Committee on Rules shall appoint two members, and the*
22 *Speaker of the Assembly shall appoint two members. The*
23 *appointments shall be made after soliciting recommendations of*
24 *the Office of the President of the University of California.*

25 ~~(c) All members shall be appointed to the panel by July~~
26 ~~September 1, 2007. Each member~~ *Members shall be appointed*
27 *for a three-year term. three-year terms, except that, with respect*
28 *to the initial appointees each appointing power shall appoint one*
29 *member for a one-year term and one member for a two-year*
30 *term. Members may be reappointed for additional terms without*
31 *limitation.*

32 ~~(d) The panel shall meet as often as it deems necessary, with~~
33 ~~consideration of available resources, but at a minimum, twice a~~
34 ~~year. three times per year. The office shall be responsible for~~
35 ~~staffing and administration of the panel.~~

36 *(e) The panel meetings shall be open to the public and be*
37 *subject to the Bagley-Keene Open Meetings Act (Article 9*
38 *(commencing with Section 11120) of Part 1 of Division 3 of Title*
39 *2 of the Government Code).*

1 ~~(e) Members of the panel shall serve without compensation,~~
2 ~~unless program funding is made available for this purpose, but~~

3 ~~(f) Members of the panel shall be reimbursed for travel and~~
4 ~~other necessary expenses incurred in the performance of their~~
5 ~~duties under this chapter, but shall not receive a salary or~~
6 ~~compensation.~~

7 105449. ~~(a) The panel shall provide scientific peer review~~
8 ~~and make recommendations to the division and office regarding~~
9 ~~the design and implementation of the program, with the division~~
10 ~~and office including specific recommendations for chemicals that~~
11 ~~are priorities for biomonitoring in California, as specified in~~
12 ~~subdivisions (b) and (c), with the program retaining final~~
13 ~~decisionmaking authority. The panel shall review program~~
14 ~~priorities, draft protocols, study reports, outreach materials, and~~
15 ~~shall make recommendations to the secretary and the director~~
16 ~~regarding all of the following:~~

17 ~~(a) Chemicals that are priorities for biomonitoring in~~
18 ~~California and communities where biomonitoring will take place.~~

19 ~~(b) A review of how findings and reports are communicated~~
20 ~~prior to their release to participants, legislators, and the public.~~

21 ~~(b) The panel shall recommend priority chemicals for~~
22 ~~inclusion in the program using the following criteria:~~

23 ~~(1) The degree of potential exposure to the public or specific~~
24 ~~subgroups, including, but not limited to, occupational.~~

25 ~~(2) The likelihood of a chemical being a carcinogen or~~
26 ~~toxicant based on peer-reviewed health data, the chemical~~
27 ~~structure, or the toxicology of chemically related compounds.~~

28 ~~(3) The limits of laboratory detection for the chemical,~~
29 ~~including the ability to detect the chemical at low enough levels~~
30 ~~that could be expected in the general population.~~

31 ~~(4) Other criteria that the panel may agree to.~~

32 ~~(c) The panel may recommend additional designated~~
33 ~~chemicals not included in the CDC report, for inclusion in the~~
34 ~~program using the following criteria:~~

35 ~~(1) Exposure or potential exposure to the public or specific~~
36 ~~subgroups.~~

37 ~~(2) The known or suspected health effects resulting from some~~
38 ~~level of exposure based on peer-reviewed scientific studies.~~

39 ~~(3) The need to assess the efficacy of public health actions to~~
40 ~~reduce exposure to a chemical.~~

1 (4) *The availability of a biomonitoring analytical method with*
2 *adequate accuracy, precision, sensitivity, specificity, and speed.*

3 (5) *The availability of adequate biospecimen samples.*

4 (6) *The incremental analytical cost to perform the*
5 *biomonitoring analysis for the chemical.*

6 ~~105450. The panel shall consider the criteria and~~
7 ~~recommendations generated by the department's Biomonitoring~~
8 ~~Planning Project, the California Environmental Health Tracking~~
9 ~~Network, the California Environmental Health Tracking~~
10 ~~Program, the Environmental Health Tracking Planning~~
11 ~~Consortium, and relevant peer-reviewed studies, when making~~
12 ~~recommendations.~~

13 ~~105451. (a) Pursuant to Sections 71110 to 71113, inclusive,~~
14 ~~of the Public Resources Code, the panel and the program shall~~

15 ~~105451. (a) As appropriate, the program shall utilize the~~
16 ~~principles of the California EPA agency's Environmental Justice~~
17 ~~Strategy and Environmental Justice Action Plan that developed~~
18 ~~pursuant to Sections 71110 to 71113, inclusive, of the Public~~
19 ~~Resources Code, so that the activities of the panel and the~~
20 ~~implementation of the program provide opportunities for the state~~
21 ~~to develop policies on the specific priorities of public~~
22 ~~participation and community capacity building with meaningful~~
23 ~~stakeholder input. This strategy and plan shall accord the highest~~
24 ~~respect and value to every individual and community by~~
25 ~~developing and conducting public health and environmental~~
26 ~~protection programs, policies, and activities in a manner that~~
27 ~~promotes equity and affords fair treatment, accessibility, and~~
28 ~~protection for all Californians, regardless of race, age, culture,~~
29 ~~income, or geographic location. This~~

30 ~~(b) (1) To carry out this section, the program shall develop a~~
31 ~~strategy and plan that are to be followed in the implementation of~~
32 ~~the program. This strategy and plan shall be used to establish the~~
33 ~~framework for integrating public participation in this program.~~
34 ~~The department may utilize models used by boards, departments,~~
35 ~~and offices at the agency for community outreach pursuant to this~~
36 ~~section.~~

37 ~~(b) Public participation activities shall include, but are not~~
38 ~~limited to:~~

39 ~~(1) Conducting~~

1 (2) *Public participation shall include, but need not be limited*
2 *to, conducting stakeholder meetings and workshops to solicit*
3 *relevant information, data, suggestions, and feedback for the*
4 *development and implementation of the program.*

5 ~~(2) For community-based biomonitoring, the creation of~~
6 ~~subcommittees reflecting the composition of the communities~~
7 ~~that are being biomonitored, to advise the advisory panel.~~

8
9 Article 3. Fiscal Provisions

10
11 ~~105453. Any funds provided, shall be deposited into the~~
12 ~~Healthy Californians Biomonitoring Fund, which is hereby~~
13 ~~established within the State Treasury, for expenditure by the~~
14 ~~department and the agency, upon appropriation by the~~
15 ~~Legislature, for the purposes of this chapter. Administrative costs~~
16 ~~associated with implementing the program established pursuant~~
17 ~~to this chapter in any fiscal year shall not exceed 15 percent of~~
18 ~~the total funds deposited into the fund for that fiscal year.~~

19 *105453. Implementation of this chapter shall be contingent*
20 *on a specific appropriation being provided for this purpose in the*
21 *annual Budget Act or other measure.*

22
23 Article 4. Reporting

24
25 *105459. (a) By January 1, 2010, and every two years*
26 *thereafter, the department, in collaboration with the agency, the*
27 *office, and DTSC, shall submit a report to the Legislature*
28 *regarding containing the findings of the program, and shall*
29 *include in the report additional activities and recommendations*
30 *for improving the program based upon activities and findings to*
31 *date. Every two years thereafter, in consultation with the panel,*
32 *the department shall forward a report to the Legislature on the*
33 *program, policy, and relevant interagency activities. Copies of*
34 *the report shall be made available via appropriate media to the*
35 *public within 30 calendar days following its submission to the*
36 *Legislature.*

37 (b) The department shall provide the public access to
38 information which they are required to release pursuant to the
39 California Public Records Act (Chapter 3.5 (commencing with
40 Section 6250) of Division 7 of Title 1 of the Government Code).

1 (c) The ~~division~~ *department* and the office shall disseminate
2 biomonitoring findings to the general public via *appropriate*
3 *media, including* governmental and other Web sites in a manner
4 that is understandable to the average person. ~~All health and~~
5 ~~environmental exposure data shall be provided to the general~~
6 ~~public in a summary format to protect the confidentiality of~~
7 ~~program participants. Within 30 calendar days after the division~~
8 ~~releases its interim and final report to the Legislature, the reports~~
9 ~~shall be made available to the public.~~

10 (d) Any *health and environmental exposure data made*
11 *available to the general public shall be provided in a summary*
12 *format to protect the confidentiality of program participants. The*
13 *data shall be made available, after appropriate quality assurance*
14 *and quality control, by July 1, 2010, and at least every two years*
15 *thereafter.*